IN THE SPECIFICATION

Page 1, line 26 – page 2, line 6, please replace with the following:

In the living cells, the four deoxyribonucleosides (dN) result from the "salvage pathway" of nucleotide metabolism. A group of enzymes is involved in cellular catabolism of deoxyribonucleosides. Besides deoxyriboaldolase (EC 4.1.2.4) and deoxyribomutase ~~(EC 2.7.5.1)~~ (EC 2.7.5.6), this group also includes thymidine phosphorylase (EC 2.4.2.4) and purine nucleoside phosphorylase (EC 2.4.2.1.). These four enzymes are induced by the addition of deoxyribonucleosides to the growth medium. The genes coding for these enzymes have been shown to map closely together on the bacterial chromosome (Hammer-Jesperson and Munch-Peterson, Eur.J.Biochem. 17 (1970), 397 and literature cited therein). In E.coli the genes as described above are located on the deo operon which exhibits an unusual and complicated pattern of regulation (Valentin-Hansen et al., EMBO J.1 (1982) 317).

Page 6, lines 14-30, please replace with the following:

Deoxyribose 1-phosphate (dR1P), the starting compond of the method of the invention, is a rather unstable compound, the isolation of which is difficult. In a preferred embodiment of the present invention, d1RP is generated in situ from deoxyribose 5-phosphate (dR5P) which is relatively stable at room temperature and neutral pH. This reaction is catalyzed by a suitable enzyme, e.g. a deoxyribomutase ~~(EC 2.7.5.1)~~ (EC 2.7.5.6) or a phosphopentose mutase (PPM, EC 5.4.2.7) which may be obtained from any suitable source as outlined above. The reaction is preferably carried out in the presence of divalent metal cations, e.g. Mn^{2+} or Co^{2+} as activators. Preferred sources of deoxyribomutase are enterobacteria. Particular preferred sources of native or recombinant PPM are prokaryotic organisms such as E.coli. Recombinant PPM may be isolated from E.coli strain pHSP 275 (CNCM 1-2188) deposited on April 23, 1999, which is a recombinant E.coli strain transformed with a plasmid containing the E.coli deo B (phosphopentose mutase) insert. The nucleotide sequence of the PPM gene and the corresponding amino acid sequence are shown in SEQ ID NO. 17 and 18 and 5 and 6.

Page 12, line 27 – page 13, line 8, please replace with the following:

Moreover, the present invention also covers nucleotide sequences which, on nucleotide level, have an identity of at least 70%, particularly preferred at least 80% and most preferred at least

PAGE 2/12 * RCVD AT 5/22/2006 4:01:42 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/16 * DNIS:2738300 * CSID:212 318 3400 * DURATION (mm-ss):03-34

90% to the nucleotide sequence shown in SEQ ID NO. 13. Percent identity are determined according to the following equation:

$$I = \frac{n}{L} \times 100$$

wherein I are percent identity, L is the length of the basic sequence and n is the difference between the number of nucleotides or amino acids ~~difference of a~~ of the selected sequence ~~to~~ and that of the basic sequence.

PAGE 3/12 * RCVD AT 5/22/2006 4:01:42 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/16 * DNIS:2738300 * CSID:212 318 3400 * DURATION (mm-ss):03-34